

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
5. (Cancelled)
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21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (Currently Amended) A system for managing congestion and avoidance behavior of network processors, the system comprising:

a plurality of network processors controlling network traffic, a first of the plurality of network processors being of a different model or version from a second of the plurality of network processors;

a host processor including a congestion control application that manages congestion and avoidance behavior of the plurality of network processors, the congestion control application being network processor independent such that the congestion control application need not have specific knowledge of a network processor's hardware, software, or firmware in order to manage the network processor's congestion and avoidance behavior; ~~and~~

a plurality of application programming interfaces (APIs), each of the plurality of APIs being usable by the congestion control application of the host processor, via a multi-word header of a plurality of words, to manage the congestion and avoidance behavior of any of the plurality of network processors, none of the plurality of APIs being limited for use with a specific network processor model or version, and

the multi-word header usable for congestion control, wherein the multi-word header is comprised of a plurality of words where a first part of the multi-word header consisting of a first plurality of words is common to the congestion control application and a second part of the multi-word header consisting of a second plurality of words is common to a plurality of congestion algorithms.

29. (Previously Presented) The system of claim 28, wherein the congestion control application of the host processor need not be modified in order to add a new network processor model or version to the system.

30. (Previously Presented) The system of claim 28, wherein the congestion control application of the host processor uses the plurality of APIs to identify a location in one of the plurality of network processors where congestion and avoidance behavior is to be managed.

31. (Previously Presented) The system of claim 30, wherein the identified location in the one network processor includes an ingress side and an egress side.

32. (Previously Presented) The system of claim 31, wherein the ingress side of the identified location in the one network processor includes a plurality of ports, a plurality of receive queues, and a plurality of receive flows.

33. (Previously Presented) The system of claim 31, wherein the egress side of the identified location in the one network processor includes a plurality of scheduler flows, a plurality of scheduler queues, a plurality of transmit queues, and a plurality of ports.

34. (Previously Presented) The system of claim 30, wherein the congestion control application of the host processor uses the plurality of APIs to select a congestion control algorithm to apply at the identified location in the one network processor.

35. (Currently Amended) The system of claim 34, wherein the plurality of APIs return a null behavior to the congestion control application of the host processor ~~when the selected congestion control algorithm~~ an operation is not supported or when a function is not implemented by the one network processor.

36. (Previously Presented) The system of claim 28, wherein the plurality of APIs include a configure API, an update API, an enable API, a disable API, and a list API,

the configure API being usable by the congestion control application of the host processor to configure the congestion and avoidance behavior of any of the plurality of network processors,

the update API being usable by the congestion control application of the host processor to update the congestion and avoidance behavior of any of the plurality of network processors,

the enable API being usable by the congestion control application of the host processor to enable congestion control algorithms for any of the plurality of network processors,

the disable API being usable by the congestion control application of the host processor to disable congestion control algorithms for any of the plurality of network processors, and

the list API being usable by the congestion control application of the host processor to view congestion and avoidance information concerning any of the plurality of network processors.

37. (Previously Presented) The system of claim 28, wherein each of the plurality of network processors resides in a switch or a router.

38. (Previously Presented) The system of claim 28, wherein the plurality of network processors control network traffic on a plurality of networks.

39. (Previously Presented) The system of claim 28, wherein congestion and avoidance behavior of a network processor includes how packets are handled by the network processor when the network processor is unable to process every packet during a particular interval.